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**Printing, Designing and Binding Books in Buddhist Asia:
A Reattempt to Seek for the Place Where and the Date When
The *Prajñā-pāramitā-ratna-guṇa-saṃcaya-gāthā* in Blockprint
Recovered in the Turfan Area Was Produced**

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0.0. **Introductory** — In September 1979 I travelled extensively in China with a group of scholars led by Professor Osamu Takada (高田修: 1907-2006). Then, together with a few of them I had a chance to visit the Turfan Exhibition Hall (吐魯番展示館, now named Turfan Museum 吐魯番博物館). I was extremely excited to find just by chance a small torn fragment of the rare blockprint text of the *Prajñā-pāramitā-ratna-guṇa-saṃcaya-gāthā* (abbreviated hereinafter: *Rgs*). Until recently, however, I have overlooked some deeper problems of typesetting, printing, designing and binding the books of Buddhist Sanskrit literature in blockprint particularly those produced in the Central Asian area. This important query had caught me in the first place in an urge when I began to wonder over again about the date when and the place where this rare *Rgs* blockprint text was produced. This text, though very fragmentary, does no doubt represent a different version, if not a recension. Before then I thought there was not the slightest room for doubt regarding the date and place of production. — I had simply thought almost automatically that such block-print texts were printed in the capital city of Peking in pre-modern period (Cf. e.g. among others, Heissig 1954, p. 154) — most probably in the Temple Sung-chu-ssü [Sōng-zhù-sì: 嵩祝寺] at its printing house, as it is called *par-khan* in Tibetan. Furthermore, therefore, I had simply doubted the place of discovery at the Bezeklik caves (Bāzāklik · 伯孜克里克千佛洞), explained in the exhibiting caption. — In this connection mention may be made to the fact that there is an *Rgs* text printed most probably here at the Temple Sung-chu-ssü (see Yuyama 1976, p. xxvii, for further details with bibliographical notes). I must confess that I have overlooked the meaning of the fact that the block-print fragment of the *Rgs* recovered in the Turfan area was a book of accordion-type binding. It is therefore necessary now to look into the matter of printing, binding and designing books in this region (see an enlightening and everlasting work by Gabain 1967 among others). — Regrettably, this extremely important Indic *Rgs* fragment in question is not mentioned, but Chinese, Sogdian, Uighur fragments in colour in the recently published otherwise very informative guide book for the people at large (Tan 2012).

0.0a. When I found the *Rgs* blockprint fragment at Turfan, I was so glad that I asked the staff to

permit me to take a photo for further careful study. I was immediately refused to do so. I begged again, saying that my research result should be published by them. When I had given up my idea to study it, I saw a photo of the fragment on browsing the library stacks (Seki 1979). But I received no response to my request to let me have a copy from the photographer, for I could not read the small letters. Thanks to this photo, however, I could then study it for the most part (Yuyama 1986). Only recently I could obtain a beautiful photocopy (for further details see Yuyama 2014 with Plate 12).

0.1. The reason why I had thought that the very *Rgs* block-print text was produced in Peking was simply as I had seen the *Vajracchedikā Prajñāpāramitā* text in blockprint in the Hsü Ti-shan Collection (see §0.1a below), which bore a handwritten note on the title page, i.e. 北京嵩祝寺版 十六年九月許地山置, “A copy printed at the Temple Sung-chu-ssü in Peking — placed by Hsü Ti-shan in the Ninth Month of the Year 16 (= September 1927 CE)” (cf. Yuyama 1967, p. 61; also Harrison 2010, p. 207). A similar-type bilingual *Rgs* text was also among the collection. This print was used by E. Obermiller for his edition, which I call Recension B (Obermiller 1937). Incidentally, those texts are printed in the *Raṅjana*, or *Lañ-tsha*, script for the Indic text and its transliteration underneath in the Tibetan *dBu-can* script, and further the third line is the Tibetan translation printed in the *dBu-can* script. — Since the nineteenth century CE there have appeared a number of works on the Indic scripts and their allied alphabets (see Yuyama 1967, p. 95-103, 105f., 114-116). Among the Indian scholars I still appreciate a classical work on the subject published for the first time by Gaurīśaṅkar Hīrācandra Ojha in 1918 (Ojha 1959, cf. Yuyama 1967, p. 96).

0.1a. Among the Collection Hsü Ti-shan [= Xu Dishan (許地山), or 落花生 in his pen name (Taiwan 1893-Hong Kong 1941)], in the Australian National University Library in Canberra there are several Indo-Tibetan blockprint texts, including the *Rgs*. This famed private collection consisting of about 20,000 volumes was bought for the A. N. U. Library in December 1950 from Hong Kong by Charles Patrick FitzGerald (London 1902-Sydney 1992), the then Professor of Far Eastern History in the Institute of Advanced Studies, A.N.U. They are now kept in the Rare Book Room in the Menzies Library, the main library of the University. It was named in honour of the twelfth Prime Minister of Australia, Sir Robert Gordon Menzies (1894-1966). — Her Majesty Queen Elizabeth II officially opened the R. G. Menzies Library on 13 March 1963. On the acquisition of this famed collection one may refer to the homepage of the Australian National University Library, re: *Library home* ⇒ *Celebrating R.G. Menzies Library 50th Anniversary* ⇒ *Collection 1950* ⇒ *The Xu Dishan [許地山] acquisition*.

0.1b. Just incidentally, this famous temple has existed until today at the Eastern Capital Ward (北京市東城區嵩祝北路), eastward of the North Sea Park (北海公園), or northeastward of the Forbidden City (紫禁城). It was completed in the year 1733 (i.e. in the eleventh year of the Yung-chêng Era in the Ch'ing dynasty: 雍正十一年). On the west was the Temple Fa-yüan-ssü (法淵寺), and on the east Temple Chih-chu-ssü (智珠寺). Both of them have been well known in history. Both Temples Sung-chu and Chih-chu have been recognized as a unit of the cultural properties of the City of Peking since 2012 (北京市文物保護單位). — It is said that the temple Sung-chu-ssü has partly been altered to a three-star gorgeous western restaurant for the wealthy, and that some intelligent citizens regret it very much. I have no idea how the invaluable cultural heritage of this area is now preserved.

0.2. This Hsü's description about the printing house leads us to conclude that the printing may *not* go back before 1712 [康熙五十一年] — around the year the temple was begun to construct. Thereafter it has become a famed printing house of Buddhist texts, particularly Tibetan texts, if not Indo-Tibetan texts in the main. And there may have existed more Indo-

Tibetan bilingual texts than we have now at our disposal. The Temple Sung-chu-ssŭ (嵩祝寺) belonged to the dGe-lugs-pa School [格魯派]. It is also to be noted that it printed the Chinese *Tripiṭaka* under the imperial license of Emperor Yung-chêng 雍正 (1678-1735, r. 1722-1735). It took six years to complete it.

0.3. Further in this connection, I would like to make a note that Hsü Ti-shan was not just a renowned writer but also a prominent philologist specializing in Indian philosophy. Among his works I appreciate his bibliographical work. It is a pity that this has not been received widely in the scholarly circle probably due to the uneasy state of political affairs in those days. Until some time ago or probably even at present, I believe, that this has offered and still offers a good deal of useful bibliographical information of high standard (Hsü Ti-shan 1933). This fact tells us silently that Hsü Ti-shan knew what he was collecting — such invaluable materials. He was not just a maniacal antiquarian rare-book collector!

0.4. It is terribly difficult, needless to say, to judge if there were Indic or Indo-Tibetan materials printed at the Temple Sung-chu-ssŭ without having seen all such materials printed there. It seems, however, quite probable that the prints produced at the Temple Sung-chu-ssŭ were all block-plate prints (and no movable type printings) in *pustaka* (or *pothī*) form, many printed in red ink and no accordion-type books. It is to be noted here that there seem to be quite a few bilingual texts, Indic (Sanskrit) and Indic in Tibetan transliteration one after each line alternately. And they all seem to be rather modern like those in the Collection Hsü Ti-shan.

1.0. Printing & Designing Books: — In this paper it is not my basic aim to look for the oldest printed matter in Asia. But I should perhaps make rather a brief survey to see the historical background. As often confirmed, woodblock printing developed in Asia several centuries before it was introduced in the western world (see e.g. Helman-Ważny 2014, p. 116). It is well known that the oldest printed matter in our sense is the *Dhāraṇī*-texts enclosed inside the wooden miniature *stūpa*, called “One-Million-Stūpa *Dhāraṇīs* (百萬塔陀羅尼)”. The *stūpa* is about 20 cm high, and was distributed mostly to the then eminent temples in the capital city of Nara (奈良) and its vicinity like Settsu (摂津, or present Osaka 大阪), Ōmi (近江, or 滋賀 now) as well. It was printed most probably by imperial decree or prayer of Empress Shōtoku (稱徳天皇: 718-770, r. 764-770 CE) in the first year of Hōki Era (寶龜元年, i.e. 770 CE). Every *stūpa* contains one of the four *dhāraṇīs* out of the **Raśmivimalaviśuddhaprabhādhāraṇī* (cf. Hōbōgirin No. 1024): 無垢淨光大陀羅尼經 (Taisho No. 1024, XIX p. 717c-721b). Those four are 根本陀羅尼呪 (Taisho XIX, 718b5-16; cf. 721b13-22) • 相輪櫟中陀羅尼法 (719a10-16) • 自心印陀羅尼法 (719c28-720a6) and 六波羅蜜陀羅尼 (721a1-4). After some long debates on the printing method, it was proved that these *Dhāraṇī*-texts enclosed therein were printed by wooden blocks (not bronze as often so considered). Furthermore, this method had continued for millennia at the Temple Tōdai-ji (東大寺) of Nara (Fujieda 1968b; Shiraishi 2007; etc.).

1.0a. It is said that the same *Dhāraṇī*-text, i.e. 無垢淨光大陀羅尼經: **Raśmivimalaviśuddhaprabhādhāraṇī*, was uncovered at a Korean temple named Bul-guk-sa (佛國寺), when it was reconstructed in 1966. It has been dated the beginning of the eighth century CE — as the oldest printing. I would think

that further investigations by the specialists must be made before the both are compared. The temple began construction in the year 751 and completed in 774 CE. As far as I see both, I cannot judge which is more clearly printed technically (cf. also Ōuchida 1988, p. 46). Many multiple copies were printed in Japan, whereas the number of the Bul-guk-sa printing is not known to me. At least one can say that both of them seem to have been produced almost at the same period, and perhaps almost in the similar manner. Let us wait for the scientific conclusion made by the historians and specialists in printing technology.

1.1. In this respect the most famous print is the well-known *Vajracchedikā* text in Chinese translation, dated 868 CE, brought back from Tunhuang by Aurel Stein (1862-1943) and now kept in the British Museum (Library) in London (see e.g. Stein 1928). Furthermore, it is noteworthy that the whole blocks of the so-called Korean edition of the Tripiṭaka (高麗大藏經), carved most probably in the middle of the thirteenth century CE in the first instance are still preserved at the Temple Heyin-sa (伽耶山海印寺) in the southern part of the Korean peninsula (慶尚南道陝川郡). The history of this printing is rather complicated. I am not going to discuss such questions here to seek for the earliest printing by wooden blocks. My purpose of writing this paper is not to look into the history of printing Buddhist literature in Eastern Asia. Nevertheless, I cannot help but cite two everlasting classical works of importance in this respect (i.e. Demiéville 1953 & de Jong 1968).

1.2. As mentioned above, it is doubtlessly clear that Indo-Tibetan books were printed widely in Asia. From the graphical point of view, it is now clear that the farthest eastern remain of the *Raṅjana* (or *Laṅtsha*) script is to be found on the bell at the Temple Yeon-bog-sa (演福寺) in Kaesŏng (開城). Furthermore, it is to be noted that the inscription was cast on the bronze (or gold-bearing copper) bell by an artisan or craftsman sent from the Yüan authorities. It dates back no later than 1346 CE (= 高麗・忠穆王二年). This date is most probably just one year after the construction of the Chü-yung-kuan (居庸關) in 1345 (= 至正五年), if not earlier (cf. Yuyama 1985a & 1985b). Incidentally, it may also be emphasized here that the Korean (Goryeo) dynasty under the reign of the twenty-ninth King Chung-mok (忠穆王, or Padma rDo-rje in Tibeto-Mongol appellation: 1337-1348, r. 1344-1348) and further towards the end of the dynasty had already been more and more under the Mongolian political power and cultural influence. I must frankly confess that I had to attach more importance on this background in the past.

1.3. The script named *Raṅja(na)*, or *Laṅ-tsha* in Tibetan, is a kind of syllabarium or syllabary. And it is sometimes identified with the *Kuṭila* script, as it is curved: cf. Indic *kuṭ-*, “to bend, become crooked”. This is why it is defined as an *abugida* system of writing. But I wonder if this describes or defines it correctly. In any case it was already in use in the eleventh century and is still used among the Indo-Tibetan cultural area today. It has reached wherever the Tāntric Buddhism became prosperous. Even at present we see a number of examples in the temples of Tibetan Buddhism, and furthermore among the Nepālī-Newārī area even as a writing tool on the sign boards of streets, shops, and so on. There is no doubt that the script had arrived in the Central Asian region, if not the kingdom of Hsi-hsia before they created the Hsi-hsia characters modeled certainly after the Chinese characters. The best example must be the six-script inscriptions at the Chü-yung-kuan (居庸關) as seen above. It may be worth noting that the Tibetans have produced many a guide-book of scripts,

syllabaria or alphabets, e.g. *Rgya-dkar-nag rgya-ser kasmi-ra bod hor-gyi yi-ge dan dpe-ris rnam-graṅs maṅ-ba*, of which the author is said to be Ārya Paṇḍita in the early 19th century CE (Yuyama 1967, p. 84-100 etc.; Nakano 1968 & 1971; Lokesh Chandra 1982). Furthermore, it is to be noted that a leading scholar in the related field of study has edited an interesting work, in which are included a number of texts including *Dhāraṇīs* in and with *Raṅjana* script (cf. Saerji 2013). As mentioned above, the farthest eastern remain of the *Raṅjana* script is on the bell at the Temple Yeon-bog-sa (演福寺) in Kaesŏng (開城) (cf. *supra* §1.2). — Regarding things Tangut or Hsi-hsia in archaeology in general, one finds quite a few introductory works, such as the one written by the Director of the Ning-hsia (= Níngxià 寧夏) Museum at Yin-ch’uan (= Yínchüan 銀川) (i.e. Li 2011, esp. on the inscriptions, p. 6f.; governmental seals and coinage, p. 7f.; literature & printing, p. 10f.).

1.4. It is generally emphasized in recent years that the movable printing types were invented by the famed agriculturist Wang Chên (王禎: 1295-1333 CE) in the Yüan dynasty (Ch’ien 2004, esp. p. 190f., Ch’ien 2007, esp. p. 205-207), as he himself explains in his later works (cf. Britannica 2011, s.v. 王禎農書). On publishing his agricultural cyclopaedic work entitled *Nung-shu* (農書, either 36 or 22 volumes) in the second year of the Huang-Ch’ing era (皇慶二年: 1313 CE) he used the movable wooden block printing types. It is said that he had a craftsman carve more than 60,000 characters (*Britannica* 2002, under the article on the “History of printing origins in China”). The original text seems to have been lost by now (Watabe 2001-2003). This may explain why it is also said that those wooden types were actually unused for the *Nung-shu*. Here I must confess that I am rather confused if the tradition as to the invention of wooden types by Wang Chên is realistically true. On the other hand we can safely say that the wooden types were already in use in the Yüan dynasty, looking into the historical background either from the political and cultural state of affairs in those days. — Wang Chên’s agricultural work *Nung-shu* (農書) is included in the famed encyclopaedic collection *Ssŭ-k’u-ch’üan-shu* (四庫全書), edited under the imperial order of Emperor Ch’in-lung (乾隆帝: 1711-1799) for the period of ten years since 1772. It is to be found in the group of agriculturalists (農家類 · 王氏農書). Without saying, it is not our concern how this edition was edited, destroyed by flames of wars and survived to date. In this connection it may be worth mentioning a Japanese scholar named Takeshi Watabe (*1943), a specialist in Chinese agricultural tools in particular, describes on the website that this book is the most important work in the history of agricultural science and technology in China. He emphasizes moreover that the strict revision of such texts are needed.

2.0. Let me go back to the main question: looking into the printing history. I must without fail cite Akira Fujieda (藤枝晃: 1911-1998), who confirmed as early in 1958 with his highly experienced eyes that the Tanguts or Hsi-hsia had invented the so-called movable printing types in wood, and thereafter in clay (Fujieda 1958). In his enlightening article he proves how the prints were made, showing the material seen on the paper as well as its rear page, yes as if it were a shadow picture (beautifully demonstrated on the plate: *op.cit.*, between p. 488-489). Later on he has explicitly shown the evidence, say more systematically and persuasively in his enlightening work (Fujieda 1971, esp. p. 270-276, incl. plates 101-102). Fujieda thinks

that these materials were printed in the mainland of China as early as in the middle of the thirteenth century. It seems now believed that the woodblock printing goes back to the beginning of the twelfth century in the oasis cities on the silk road inhabited by the Chinese, Uighurs, Tanguts and others (Helman-Ważny 2014, p. 118f.). It is traditionally believed that their characters were invented, needless to say, with reference to the Chinese. — Regarding the history of printing in China, I should perhaps add an enlightening work with numerous illustrations (i.e. Yoneyama 2005, cf. also Ch'êng 2005; further interesting article full of illustrations by Huang 2011). — In this connection I find it a great pity that I have been unable to see Saliceti-Collins 2007 (MA thesis at the University of Washington, Seattle).

2.1. Regarding the printing in the Hsi-hsia kingdom, it may be necessary to see the development of the characters to record their language, i.e. Hsi-hsia characters. It is without doubt not irrelevant to the peculiarity of the Hsi-hsia characters. But it may not be the place for this question in this paper. I cannot nevertheless refer to some stimulating works (e.g. AA-TUFS 2014 (cf. Arakawa 1997 & 2004, 2008, Gorbačova-Kyčanov 1963, Laufer 1916/1987, esp. p. 107f./p. 739f., Sung 2010, Wolfenden 1931). But I must frankly confess that some are rather disappointing in this regard (e.g. Nishino 1996). The founding ruler, Li Yüan-hao (李元昊, r. 1038-1048), either Ching-tsung (景宗 by temple name) or Wu-lieh (武烈帝 by posthumous name) had his attendant *Yeh-li-jên-yung (野利仁榮: *d.* 1042) develop the characters to record the language by imperial command. The characters 6,133 in number are said to be proclaimed already in 1036 and came into use during his time of reign. More precisely this period, say 1038-1227 CE under the rulership of Ching-tsung, is pointed in an enlightening article (i.e. Huan 2011, p. 135 & 136 cum n. 3, also Fig. 4.9 on p. 154).

2.2. It is also believed that the wooden types were invented in the year 1167 CE under the rule of Li Jên-hsiao (李仁孝, r. 1139-1193), named either Jên-tsung (仁宗) by temple name or Shêng-chêng (聖禎帝) by posthumous name. This ruler seems to have promoted their culture both of the ethnic tradition and the imported multiracial civilization, as indicated by various scholars specializing in the Hsi-hsia Empire (see e.g. Matsuzawa 1986). Furthermore, at the same time it is to be noted that the Mongol made the Tibetan Lamas administer printing such Buddhist texts. In our human history it is to be noted that the invaders ruled the invaded but often imported the superior culture or civilization from the invaded. — Contrary to my heightened expectation, it is a pity to find the printing by the use of movable wooden and/or clay block types invented or exploited by the Tanguts in the twelfth century is not touched by a leading specialist in his otherwise remarkably enlightening article (e.g. Lin 2010). In this article he concludes that the ‘invention of using Chinese wood blocks for printing occurred in the early Tang Dynasty (618-713 A.D.)’ (Lin 2010, p. 35).

2.3. It may well be worth mentioning here that a Japanese specialist in printing, or rather a leading printing engineer as well as a researcher in the history of printing, named Itaru Matsune (松根格: *1936) has published his travels to look for such materials as wooden and clay block types used in the Hsi-hsia kingdom. He has witnessed a number of printed literature (e.g. Matsune 2003, esp. p. 73-77). Incidentally, he runs a museum in the township of Miyagi, Saga prefecture in Kyūshū (九州佐賀県三養基／みやぎ), to exhibit his Matsune

Collection of Printed Matters. To my great regret, I have been unable to see his famed collection. Another Japanese who has shown his keen interest in the movable printing types is Susumu Saitō (齊藤進: *1938) by name (cf. Saitō 2007, p. 39 with a coloured photo on p. 41).

2.4. Finally, we are now given a boon on the wooden movable types, i.e. an enlightening article published very recently (P'êng 2014). Although he has treated the types for printing Uighur literature, it shows an extremely informative proofs of wooden movable printing types found in the Tunhuang caves. He shows the coloured photos of the real types kept in the Guimet Museum (or Musée National des Arts Asiatiques Guimet) of Paris which were discovered by Paul Pelliot (P'êng 2014, p. 57a: fig. 1), and some types kept in the Metropolitan Museum of Arts in New York, which was discovered by Thomas Francis Carter (*ibid.*, p. 58a: b/w fig. 2) – (cf. Carter 1925 etc.). Six examples found there are also shown in colour (*ibid.*, p. 59b: col. fig. 4). Most interesting facts are those discovered in the Tunhuang caves towards the end the twentieth century (*ibid.*, p. 60b: figs. 5 & 6).

2.5. It goes without saying that I am no specialist in such subjects or topics on Central and East Asian history. I am much interested, though far beyond my capacity, to learn of the relations among the dynasties particularly during the Hsi-hsia kingdom, say from the middle of the twelfth century to the beginning of the thirteenth century CE, for such a background history may well reveal much clearer cultural aspects in these periods. In this respect I note the factual record of introduction of printing (see e.g. Diemberger-Clemente 2013, Ehrhard 2000a&b & 2013). Furthermore, I cannot overlook the influence of the Mongol, the conqueror of Hsi-hsia, upon the Tibetans, not to speak of the Tanguts (see e.g. among others a recent work by Everding 2013). Not just on the political pressure upon the conquered but also religious imports from the latter what the conqueror imported from the conquered was exported extensively to the other parts of the world.

2.6. Looking at the recent states of researches into the printing history in these areas, I must confess that I am really overwhelmed by a number of splendid stores of knowledge in this connection. Nevertheless, it seems to be universally accepted that the block-printing method was already in use among the Tanguts and such factual remains of documents have been unearthed there, that is to say, it must almost be certain that such printing methods were invented among the Tanguts in the twelfth century CE. In Khara-khoto a print dated 1153 CE was discovered (as cited Schaeffer 2009 by Diemberger 2012 cum n. 11; also Helman-Ważny 2014, p. 68 fig. 28, and p. 121 cum n. 16). This beautifully preserved print (a small prayer in Tibetan now kept in St. Petersburg) bears page 52 of the folded book. It is very important when we think over the printing Buddhist literature in Tibet (see e.g. Diemberger 2012, also Diemberger-Clemente 2013, Shen 2010, esp. p. 337f., further Shen 2013, esp. p. 222 cum n. 54-55). In this connection attention may have to be made to the fact that xylographic production took place among the Mongols (v.d. Kuipj 1993; also Helman-Ważny 2014, p. 122). Unfortunately, I have been unable to see Elliott-Diemberger-Clemente 2014. — With reference to the printing in the kingdom of Hsi-hsia I find it a great pity that I have been unable to see Saliceti-Collins 2007, which may well give an enlightening idea to consider the present questions.

2.6a. — In considering the Buddhist heritage in printed form I cannot help citing my dear friend's achievements and services (i.e. Smith 2001), which, I hope, every scholar would agree with me. At last he founded a great organ called 'Tibetan Buddhist Resource Center' in New York City. Belatedly, he had received a tribute (*Smith Volume* 2007). — Further in this connection, I wish to cite two projects based in Great Britain for their fantastic services: 'IDP = International Dunhuang Project' (British Library) and 'Tibetan-Mongolian Rare Books & Manuscripts Project', based at MIASU = Mongolia & Inner Asia Studies Unit (University of Cambridge). With regard to this paper of mine I am expecting the project MIASU will bring out something productive for the future research, because the unit founded basically on the hitherto less-known materials brought back by Col. Sir Francis Younghusband (1863-1942) as well as Col. Dr. Lawrence Austine Waddell (1854-1938). Needless to say, there are much more projects performing great service to the human knowledge. If one starts listing them, there will be no end. — No one will however disagree with me: the history of Tibetan *Tripiṭakas* cannot be neglected when one discusses the printing Buddhist texts in Indo-Tibetan and perhaps Sinico-Tibetan cultural sphere. At least I feel obliged to cite the name of Helmut Eimer (*1936) of Bonn, who has paved the splendid highway with a great number of writings through his storehouse of knowledge till today (see e.g. Eimer 1992 and 1996 among very many others). Every scholar in the related fields of study may recall Eimer's careful investigation into the different printings of the same text in the course of transmissions. In this connection it is also to be noted that Tibetan savants have noticed such problems. This complicated and difficult problem has been discussed in detail by van der Kuijp in his enlightening article (v.d. Kuijp 2010). — Much more information on the varieties of prints, blockprints, printing houses and so on is available in the bibliographical treasure house now thoroughly revised (Sueki 2014).

2.7. After all, it can be concluded that the printing method in movable block types invented or exploited by the Tanguts in the kingdom of the Hsi-hsia Empire, and then had reached the Tunhuang area. It is important to note, therefore, that the printing method had doubtlessly reached various oasis cities in Central Asia before the decline of the Hsi-hsia Empire in 1227 CE. In this connection it can also be noted that there have survived some printed matters among the so-called Turfan collection of Sanskrit blockprint texts in *Lañ-tsha* script containing Hsi-hsia characters, e.g. SHT Nos. 646 (I p. 290f., cum Tafel 40: b/w fig.). On its first report it has escaped the attention of the very specialist (Gabain 1967, p. 33f/, esp. p. 34). This fragment, discovered at Qara-hoja (高昌) by the second German expedition to Turfan (1904-1905), is described as a blockprint in red colour in *Pāla* script. This 'ungewöhnliches' format may well confirm that it is a portion of an accordion-type print, certainly not a *pothī*-format, as there seems to exist a pleat or crease made after it was folded, and further the rear side of the paper was not printed. Incidentally, it is not really an essential matter to pinpoint the place where such texts were discovered by the early twentieth-century expeditions. But it is naturally interesting to note that there have appeared interesting works on such detailed geographical investigations (e.g. Nishimura-Kitamoto 2014).

2.7a. *Some notes on the Turfan Sanskrit fragments*: SHT, I, p. 291 n. 3: "Fünf chinesische, wohl phonetisch verwandte Zeichen"! But as a matter of fact, they are nothing but Hsi-hsia characters, most probably the name of the *dhāraṇī*-text. I have however been unable to decipher them! This is the reason why I had hesitated to point it out in my review of this extremely important catalogue (Yuyama 1970). Incidentally, this fragment is shown in colour as two separate fragments clearly on the website of the IDP (= International Dunhuang Project, based in the British Library, London) (cf. also Chinnery-Li). IDP also offers a database catalogue on the website.

2.8. In this connection it is to be noted that there is a Sanskrit *dhāraṇī*-fragment with Hsi-hsia characters found in Khara-khoto (see e.g. Sung 2010, also Yuyama 2014). I am afraid that I cannot decipher or judge these characters how they are pronounced. But it seems that they are the names (or titles) of certain *dhāraṇīs*, as they are all found after the Sanskrit word *svāhā* (T'a-Tu-Kao 2013, page 251 - Ill. 232: 西夏文・梵文・陀羅尼集／M1・232 F13:W83: 16.1 x 11.5 cm.). It is however quite clear that the fragment looks like a *pustaka*-form print. At the same time one notices a certain size of blank, which divides the text as if it was folded. This may also explain that it is the so-called 'pouch-binding' (袋綴), as is often seen in East Asia (cf. Yasue 2014 ; also Ōuchida 2007). It is difficult to judge, for the rear side of the fragment is not shown. I am not sure, furthermore, if it was printed in red or in black ink, probably the latter, for it has been blurred or soiled and stained a little brownish. Nevertheless, it is very important to learn that the Hsi-hsia people could print at least such Indic scripts with wooden blocks, if not yet with movable printing types.

3.0. **Book Binding:** — Binding of books is needless to say closely connected with the printing and designing. Almost from the beginning of the book making there appeared a variety of binding methods. Starting with the seals on clay and/or stones, the charms or scriptures on cliff or rock faces, writing or carving longer texts even on slates needed to arrange in order. Writing scriptures on palm-leaves in South and Southeast Asia necessitate seeking for setting pagination — a method of a drawstring casing square space was devised to bundle leaves for arranging in correct order of the written text. The position of the holes is different from each writing system to another, say, whether the text is written vertically or horizontally. This binding method is still used in such areas where they write on palmleaves (貝葉／貝多羅葉, i.e. Skt. *tāla-pattra*; cf. Pkt. *tāḍa*-, etc.). The Tibetan cultural area follows this system, but normally without using a drawstring. In order to keep regular sequence the writer or printer records pagination on each folio, either on recto or verso, either on the right- or left-end space.

3.1. There must certainly have been those who found it more convenient to make a scroll — paper without making a break or juncture of text (卷子本). Either vertical or horizontal writing depends on the character of the language. However, some used a scroll to write texts column by column, say, for example Tibetan writings on a scroll. This method is convenient for not only writing a text but also paintings with or without poems or explanations (掛軸).

3.2. The next one is a method that has become most popular in modern times, i.e. book(let), pamphlet, brochure, whichever one may call it (冊子／冊子裝). One needs no worry about scattering folios and thus confusing paginations. Almost all the books nowadays must be bound in this way. Whether this method of binding has originated in the West or in the East is another question here. Research works on such subjects or topics have recently developed more and more deeply and precisely. We learn a lot on these problems systematically for example from an enlightening article by an archivist scholar (e.g. esp. Yasue 2013b).

3.3. The method which seems to go back early days is an accordion or concertina book making, i.e. folded books (折本). In China this method has been also named in the same meaning (摺本・摺卷・摺葉). This naturally makes a different method of printing,

depended upon the nature of scripts. Accordion-type book making has become popular, for not only it is convenient to carry but also beautiful for its good appearance. It has thus become rather popular even today — not just for book making but also at a dinner table particularly for guests to find a napkin folded into pleated fan shape, or a fan-shaped table napkin or serviette. This seems to be a popular art of book making. Needless to say, this accordion-type design mounts up to a larger sum of costs. It consumes the considerable amount of paper at least twice as much. But this book binding, ‘folded book’, is defined simply as a book in a scroll without a shaft or axis, and has become popular in the early eleventh century CE in China, and its typical example is named Chi-sha edition (積沙版) of the Chinese canon (Yamamoto 2004, p. 54; further on the Chi-sha edition see Yuyama 1976, p. xxxix-xl; incidentally a beautiful photocopy is given with a simple but rich bibliography as an example in Aitani 2012, p. 13, cum fig. 9). On this rather complicated matter we find short but enlightening articles by specialists (e.g. Ōuchida 1993, Mori 1999, Yasue 2013a).

3.4. In order to avoid the time-consuming scriptural recitation method there appeared at some stage of transmission of scriptures or scriptural edification they invented a method of reciting the beginning and end title of a long scripture written or printed on a scroll. After the appearance of accordion-type books for scriptural texts the so-called convenient way of recitation was devised — flipping through the pages by skipping the contents in reading, and just reading the titles and the like (轉讀). This has been particularly convenient for reading such large texts like the great *Prajñāpāramitā-sūtra*, the so-called 大般若經, in 600 fascicles (Taisho No. 220, which occupy three large volumes: covering Taisho Vols. V-VII, more than 4,000 pages in toto), translated by Hsüan-tsang (玄奘: 602-664 CE) (see e.g. Hōbōgirin 1978, p. 33).

3.5. As mentioned above, this kind of book making has become popular throughout the world. Specialists think it a bookbinding method placed between a modern sewn book and an ancient scroll (e.g. Weston 2008, p. 54). On the same page Weston defines the method by a lucid illuminating explanation: “The concertina is made by the repeated counter-folding of a sheet of paper — the flat surfaces between the folds constitute the pages ...” (Weston 2008, *ibid.*). Furthermore, this accordion-type printing is somewhat scientifically studied and explained with illustrations as an art by graphic designers (e.g. Rowe-Will- Linton 2010, esp. p. 69 with 4 figs.). Needless to add, a musical instrument concertina in the original form was patented in 1829 in the first place by Sir Charles Wheatstone (1802-1875), a well-known physicist in London. He was also recognized as such in France. — Incidentally, a variety of concertina-type prints are seen today not only for arts but for daily commercial matters.

3.6. From above, it is quite clear that the time when the Tunhuang or Turfan areas enjoyed their golden ages for propagating Buddhism there had been popularly used variety of printing, binding, and after all designing books. Regarding the accordion-type bindings one can refer to another extremely cultivating and illuminating article by the well-known specialist (e.g. among others Drège 1984, also Drège 1986, 1991, 1999). Here again one cannot forget his precedent scholar — rather a grand savant in the relevant field (see esp. Fujieda 1967b, 1968a-d — reference can also be made further to his varied works: Fujieda 1972, 1977, 1987 & 1999).

3.7. Further in this connection one cannot forget the invention of paper in China. Its spread is nothing but the paper road transport cultural heritage and legacy (see esp. Chin 1994, Fujieda 1967a). It is generally said that paper was invented in around 105 CE by the eunuch named Ts'ai Lun (蔡倫: ca. 50-121 CE) in the Late Han dynasty. Whether this tradition is true or not, papermaking technique had most probably become known to the other world as early as the twelfth century CE. In his book mentioned above Chin has passionately and convincingly demonstrated this historical background. It is most important now to learn of the dates of papers, which have survived to date, say e.g. the fibre-scopic, micro-^o or electron micro-^o analysis, carbon-14 dating technique or more sophisticated technical methods, if any others. In the case of the blockprint *Rgs* text found in the Turfan area in question it is desirable to learn if it is the paper made within a couple of hundred years ago or more than a millennium back to the past. This can be applied to date the ink, in which the text was printed. With this regard it was already in the late 1960s when I was excited to learn of such advanced technological idea to apply for dating such materials (e.g. Bernhard etc. 1966). Needless to say, paper must without doubt have been a sumptuous item. It was never used as a sheer waste. It was thus often reused skillfully (cf. e.g. Iwao 2014). The backside of the paper was often used for other purposes, if not just for a memorandum or else (Yuyama 1985c). It is to be noted that the Tibetan-ruled Tunhuang area around the period 786-848 CE varied kinds of paper were already in use. Although paper was quite valuable, but at the same time it was in a way wasted for scribbles and at the same time to record some historical documents (Takeuchi 2013, p. 103 et al.). I am much interested to learn that in the same period there was a kind of scriptorium in Tunhuang, therefore Chinese scribes hired by the Tibetan rulers. A number of written matters, either in pothī or scroll, were made to distribute to other regions. It is also believed that the documents arrived there from Tibet, e.g. Bsam-yas (Samye) (see Iwao 2013 for further details). I note that this cultural intercourse or transmissions from Tibet to Tunhuang and then to other parts of Central Asia. — Just incidentally, papermaking method reached Japan around 610 CE via Korea. Regarding the papermaking technique, I am most interested to find that a plant species 'mulberry' family is widely used in Asia, for example Japanese *Kōzo* (楮; a euphonized form of 紙麻, 'Kamiso'; or 'Kazo' in short), 'paper mulberry', or *Broussoneia kazinoki* (梶), belongs to the family *Morus bombycis* and its related family (桑科). On his visit to Narthang Sir Charles Bell has witnessed the printing on paper, which was made from the Daphne plant (*Edgeworthia Gardneri*), the so-called Indian paper tree or Nepalese paper bush (or perhaps 滇結香 in Chinese, and possibly a kind of Japanese 沈丁花), and, as a matter of my great interest, says that it comes from Bhutan (Bell 1924, p. 86). And now Agnieszka Helman-Ważny has made a thorough investigation into the paper making in Tibet en rout to the paper-road in Asia with numerous illustrations sparing a chapter 'A Survey of Tibetan Paper' (see esp. Helman-Ważny 2014, p. 179-200 with col. figs. 109-111 and b/w figs. 112-116). After all her book is full of information. It is noteworthy to see the appearance of paper connected with the history of writing and the script – characters (Fujieda 1967a, etc. — further Fujieda 1977).

3.8. As we have seen above, the accordion-type binding became known to exist in the ancient times in the Central Asian region. One finds quite a few examples of this type, e.g. among the

manuscripts and blockprints brought back by the German expeditions to Turfan on three occasions: the first expedition headed by Albert Grünwedel from December 1902 to April 1903, the second by Albert von Le Coq from November 1904 to December 1905, and the third by A. Grünwedel from December 1905 to April 1907, jointly with the second until June 1906 (no record of this type has been reported from the materials brought back by the fourth expedition headed by A. v. Le Coq from June 1913 to February 1914): — yes, “Sanskrithandschriften aus Turfanfunden”. Thanks to the painstaking efforts of the IDP (= International Dunhuang Project), one can easily list up those SHT texts in concertina-form, or accordion-type prints: SHT 575 (discovered at Chotscho, Xočo = Qara-hoja /高昌; SHT, I, p. 254: *Suvarṇaprabhāsottamasūtra*: cf. ed. Nobel 1937, p. 25f.), 580a & 580b (brought back by the 3rd expedition from Murtuq: SHT, I, p. 256 & Tafel 35; SHT, VII, p. 256f.: *Catuṣpariṣatsūtra*: cf. ed. Waldschmidt, p. 47, 366-368), 617/a to c (concertina, scroll: 4 fragments brought back from Sengim = Sängim / 勝金 by the 2nd expedition; SHT, I, p. 273f., SHT, II, Tafel 134 & 135; SHT, VII, p. 258f.: *Nidānasamyuktasūtra*: cf. ed. Tripāṭhī, p. 76, 68, 102-104), 627 (brought back by the 1st expedition from Qara-hoja), 631a to s (16 fragments brought back from Qara-hoja by the 1st expedition; SHT, I, p. 283f. & Tafel 32: *Sarvatathāgatoṣṇīṣasitāpatrā-nāma Aparājita-mahāpratyāṅgirāvidyārāja*), 1173a & b (brought back from Qara-hoja by the 2nd expedition; SHT, V, p. 168: possibly an accordion?), 1190a & b (brought back from Murtuq by the 3rd expedition; SHT, V, p. 184f. & Tafel 79: *Sitāpatrahṛdaya* & ‘mantra and ‘Strophe des Aśvajit’), 3817 (brought back from Qara-hoja by the first expedition; SHT, X, p. 186f., for further details see Wille 2004: *Sarvatathāgatoṣṇīṣasitāpatrā-nāma Aparājitamahāpratyāṅgirāvidyārājīnī*), 4352a to c (3 fragments from Sängim 2; SHT, X, p. 390f.), 6733 (scroll – ‘Fundort nicht zu ermitteln!’; cf. Wille 2004). — For the above information I owe much to Dr. Klaus Wille of Göttingen.

3.8a. Incidentally, in his invaluable work Albert von Le Coq (1860-1930) showed a map of the Turfan area after the sketch made by Ellsworth Huntington (1876-1947) (see Le Coq 1913, p. 67). Huntington was a renowned Yale geographer (Huntington 1924; cf. Yuyama-Toda 1980, p. 1 cum n. 1 & 2), who himself made a journey to Central Asia and offered exact and nice maps (Huntington 1907, p. 297: ‘Basin of Turfan’, and folded coloured map). In this connection it is perhaps to be noted that A. von Le Coq has given many invaluable photographs of Sängim (Sengim · 勝金), Bāzāklik (Bezeklik · 伯孜克里克) and their environment (Le Coq 1913, Tafeln 72-74). One may perhaps add the maps shown by Ernst Waldschmidt in his invaluable catalogue of Indic materials from Turfan (see e.g. Waldschmidt 1965, p. XI, 8, 237, all of which are taken from von Le Coq 1926; also Waldschmidt 1925, Tafel 66 ‘Ostturkistan nach Hermanns & von Le Coq’). Many useful maps are now before us (e.g. von Le Coq 1913, map on p. 10: ‘Übersicht über die hauptsächlichsten Fundstätten der buddhistischen Antike Zentralasiens’: von Le Coq 1926, map after p. 19; cf. von Le Coq 1913, p.10). After all one cannot forget the scientific orographic maps, presented by the geologist-geographer von Richthofen, who is said to have named the ‘Seidenstraße – silk road’ (e.g. Richthofen 1877 & 1885-1912; see among others Richthofen 1877, Tafel 2). Among those explorers in these periods one may refer to another work (e.g. Huan 1954, Map No. 1 & Huan 1958, Map No. 5: cf. further Yuyama 1970, p. 267 n. 1). More recent states of the sites are available subtly and nicely (e.g. Whitfield 2010). Needless to add, there is no end of citing such materials. It can be said that there have been a number of enlightening works in the topic concerned — say, on things Central Asian. Many of them have, however, borrowed the maps from the then leading scholars on the areas (e.g. Waldschmidt 1925, Tafel 66 ‘Ostturkistan’, nach Hermanns & von Le Coq). — We can naturally

witness the present-day picturesque landscapes of many ancient oasis towns and cities in the books published in the past decades and now on the Internet. — And in these days there seem to be many ‘geographic’ photos taken from the artificial space satellites and real maps based on these photos. Some may have not appeared before us as military secret materials.

3.9. In this connection after all I am very much looking forward to see the proceedings of a conference appear sooner in the nearest future (i.e. Khyentse 2013). In this conference Tsuguhito Takeuchi (武内紹人) presented a paper (Takeuchi 2015?), of which an abstract has appeared on the website as follows: ‘Although the Tibetan manuscripts and xylographs housed in the Stein and Kozlov collections have not been paid due attention, they are extremely rich in variety. Their dates range from the late 11th to the 20th centuries. Some are written in the Old Tibetan style, some in the Classical Tibetan style, some include Mongolian texts (bilingual texts), and some are prints. Their forms also vary, including *pothī*, scroll, concertina, and codex. In this paper, I wish to introduce these manuscripts and xylographs and discuss their periodical characteristics.’ (*underlined in the quoted passage by the present writer*). — Such problems on printing, designing and binding books can be seen briefly in certain publications (e.g. Inokuchi 1979, Li 2010, further Fujieda 1995, p. 206; also Fujieda 2005). Further in this regard one may not overlook the importance of certain other methods of binding, such as the so-called stitched books as discussed convincingly in detail recently (esp. Stoddard 2010; numerous examples by Chinnery-Li). I must however confess that I am becoming rather confused as to how I could make a historical stemma of these binding and designing methods among the Buddhists in Central Asia! But at the same time I am becoming convinced that various ways or methods may have existed. It is very possible and cannot be ruled out to believe that the *Rgs* blockprint from the Turfan area in question was produced around there and *not in Peking*, as I mistakenly believed for the past decades since I discovered it excitedly at the Turfan museum. — It is eagerly hoped that the remaining portion of the *Rgs* blockprint appears before us. So that many queries raised above may well be cleared with satisfactory solutions.

3.9a. **Linguistic Affiliation of the Tangut Language** — It may be out of place to discuss the position of the language of the Tanguts (黨項), or Hsi-hsia (西夏), in this paper. At the same time, it may well be necessary to learn of the state of affairs in this respect (cf. also *supra* §2.1). Needless to say, I am no specialist in such languages and the question looks very complicated to me. It is to be noted here that specialists in Sino-Tibetan linguistics pay attention to the fact that there are four languages among the classical Sino-Tibetan systems, say, Archaic Chinese, Tibetan, Burman and Tangut (e.g. Kung 2011, also Matisoff 2004, esp. p. 327f.). The question is so complicated that no real universal conclusion seems to have yet been found among the specialists. The celebrated specialist expresses how difficult it is and shows how complicated it is (see e.g. Nishida 1989; see also *supra* §2.1). After the painstaking efforts of a number of linguists till today, however, it seems generally accepted by most specialists that the Tangut language belongs to the Tangut-Qiang languages (黨項羌), a branch of the Tibeto-Burman languages among the Sino-Tibetan family. For me it is good enough at the moment to learn that the Tangut language must have come from the area around Tibet and Sichuan (四川). No wonder there was once a strong cultural tie between the Tibetans and the people of Hsi-hsia. Among very many articles on these problems I have found some enlightening works by Kung Huang-ch'êng (or Gong Hwang-cheng: 龔煌城: 1934-2010) from Taiwan (see among others Gong 2003, p. 602, with a rich bibliography, p. 619-622). His papers on purely linguistic problems are to be

found in his collected works (i.e. Kung Volume 2002 & 2005).

4.0. To sum up —In a word my intention to write this humble paper has been just to trace how the *Rgs* in blockprint found in the Turfan area was produced. It seems probable that the printing by wooden (or clay, and later bronze) block types was invented or exploited by the Tanguts and had soon be distributed or transmitted into other oasis cultivated cities among the Central Asian area. A canonical text *Rgs* had reached the kingdom of Hsi-hsia and was printed in their own language (cf. Tuan 2009, Su 2010). Whether the Indic text was known to them or whether it was printed there is not yet known. As attested above, however, it is clear that they could print Indic texts with movable printing types. Whether the movable printing technique had come into wide use in the Central Asian oasis cities of the then leading culture must still be reviewed and verified. At least it is clear that a number of texts either in Indic, bi-lingual or otherwise have been found in various places, such as Khara-khoto, Turfan, Tunhuang and elsewhere. A high standard Buddhist thought and literature must thus have reached among the Tanguts by the twelfth century CE.

4.1. It is particularly noteworthy that the national preceptor (國師), named 拶也阿難捺 (Jayānanda), had come from Kashmir via Tibet and became active there briskly (v. d. Kuijp 1993, Nishida 2006, esp. p. 249). It is no wonder, therefore, that there have been recovered a Tangut text with a Tibetan interlinear transliteration (Stein 1928, I, Plate CXXXIV: both original and Romanized Tibetan transliteration), which was discovered at the site K.K. II outside of Khara-khoto: numbered Or. 12380-1842: K.K. II.0234.k. This is the place where Pjotr Kuzmič Kozlov (1863-1935) had spotted during his expeditions (Kozlov 2003; cf. Gorbačova-Kyčanov 1963). The Tibetan transliteration form was furnished in Roman script by Berthold Laufer (1874-1934) for Stein (Stein 1928, I, p. 449; further Ikeda 2014). This fragment is now available beautifully in colour on the IDP website. It may be worth noting here that Stein had recovered a Brāhmī-Chinese prints (Stein, *ibid.*, K.K.II.0293.a: Plate CXXV). Though described as rolls and leaves, a variety of Hsi-hsia texts from Khara-khoto are shown to us (Stein 19028, III, Plate CXXXVII). Some of them may well be accordion-type texts (see e.g. Stein 1928, *ibid.*, Texts: K.K.V.b.04.b, K.K.II.0301.a).

4.2. Apart from a number of leading scholars who came to Tibet (and elsewhere) and propagated Buddhist thought in those areas, such teachers-propagators like Jayānanda among others had come from India to Tibet and then further northward to Central and/or Eastern parts of Asia may not be rare. In particular with regard to the *Rgs* it is noteworthy here that (Pha-)dam-pa Saṅs-rgyas (Paramabuddha?) from South India arrived in southern Tibet early in the twelfth century CE and propagated the so-called Āi-byed-pa doctrine on the basis of the *Rgs* XXVII.3 (see esp. Yuyama 1997). It is to be further noted that its doctrinal text has been published critically by specialists (e.g. Kaschewsky 1973). In 1092 Pha-dam-pa seems to have established the residence at Diṅ-ri-rdzoṅ (定日縣), just north of Mt. Everest (or Jo-mo-glañ-ma) and westward of Sa-skya (Kaschewsky 1973, p. 172, Dowman 1988, p. 281). Further in connection with the Āi-byed-pa school it is noteworthy that an itinerant priest was witnessed in Mongolia even before the Second World War (Hashimoto 1942, p. 65 with a photo). For more reference I must have missed more publications of importance (e.g. Aziz

1979). Just incidentally, from the linguistic point there have appeared interesting observations (Takeuchi 1979, Hermann 1989). — Furthermore, it is extremely important to learn that there exists a hitherto unknown Mongolian version of the *Rgs* (Higuchi 1987 & 1991). This may tell us that there were certainly some so far undetected routes transmitting Buddhist thought and literature. Just incidentally, I note here that the Chinese version (Taisho 229) was translated by Fa-hsien (法賢), or alias T'ien-hsi-tsai (天息災) in 991 CE in the Sung period (Yuyama 1976, p. xxxvix-xliii; cf. Yuyama 2004, p. 277f.: §8 on Yang-i 楊億: 974-1020 CE). — As a working hypothesis, one could perhaps look for more cosmopolitan propagandists for Buddhist thoughts in their own and local languages.

4.3. More and more Buddhist materials are thus being brought out to see the light of day. In this regard one cannot overlook the publications of those materials preserved in Russia, China and Japan (cf. Yuyama 2014, p. 824f. 'Reference works'). Such texts show us not only just Buddhist literature itself but also its routes how it had diffused. This means that they reveal linguistic features and then Indic-Sinic or Indic-Tibetic-Sinic-Burmic language family comparison, and thus finally clarify the phonological development and the spread of Buddhist thought and literature. After all in this connection one cannot forget the enlightening works of pioneering scholars in the Sinic languages in the main, just for example Bernhard Karlgren (高本漢: 1889-1978: see e.g. Karlgren 1915-1919, 1919, 1922, 1923, 1954, 1957), Lo Ch'ang-p'ei (羅常培: 1899-1958: see e.g. Lo 1933, 1963, 2004, also Lo-Ts'ai 1959) in the first place, and many others since then until today. — In treating sacred texts it may not be easy to trace their glottochronological diffusion, for each of them must have made a different linguistic evolution. Moreover, they have often made mixture or hybridity on the way with one to another. This specific phenomenon was pointed out in early days of Gāndhārī since its earliest stage of research (e.g. Bernhard 1970; cf. Yuyama 1976a, 1980 & 1992).

4.4. Regarding the transmission of Buddhism in Asia as a whole, there must have been more than a single route — plural and complex. In the case of the *Uṣṇīṣavijayā Dhāraṇī* text, for example, the version on the temple bell in Korea known to us could certainly go back to or must be identified with the Chü-yung-kuan version (cf. further Bonaparte 1895, Planche II, Murata-Fujieda 1955, Tokiwa-Sekino 1976, p. 64, Yuyama 1985a). And the latter must further go more than a century back to the version printed in the kingdom of Hsi-hsia (Yuyama 2014). After all, we are now to learn of the varied ways how Buddhism, either thought or literature, has spread from one region to another or others.

4.5. By now we have noted that the Buddhists under the imperial mandate in the Yüan dynasty transmitted Buddhist thought and literature to the other parts of Asia playing the rôle of transmission as seen above (see e.g. *supra* §1.2-3 & §4.2-4). The Mongols must have imported Buddhism from their conquered Hsi-hsia kingdom. This may also explain a hitherto unknown route of transmission such as the *Rgs* in the Mongolian translation (cf. *supra* §4.2: Higuchi 1987 & 1991). This kind of interesting facts have also been made clear not only of the canonical texts but also epistemological literature (see e.g. v.d. Kuipj 1993a). It is also of much interest that the word for the Mongolian printing matter, i.e. blockprints or xylographs, is called *Hor par mar* (cf. Tibetan *par-pa*, *par-khañ*, *par-du 'debs-pa*, *šin-par*, etc.). This thirteenth-century blockprint has not escaped the attention of a serious scholar in the relevant

field of study (e.g. Helman-Ważny 2014, p. 122 cum n. 17).

4.6. There is now no room to doubt that the *Rgs* uncovered in the Turfan area was most probably produced in one of these fortress oasis cities of Central Asia. I have no reason to believe any more that such a text like the *Rgs* in question should be printed in Peking, say, at the Temple Sung-chu-ssŭ (嵩祝寺) like many Indic texts in the *Raṇjana* (or *Lañ-tsha*) script (see Yuyama 1986, 2007a-b, 2010, 2014). This fragment should therefore be placed several centuries backward in history. This is exactly the point of my reattempt in this paper by a long-winded devious means as done above. To cut a long testification short after varied evidences as shown above, I must here conclude that it is extremely important to review the preconception of spreading routes of Buddhism. After all I have tried to seek for various routes of introducing Buddhism and thus transmitting the literature in varied ways from one region to another or to the others. This route of transmission had not just been a single point and line as has long been thought in the past. There must have been more complex and plural routes than we have thought till today (cf. e.g. Yuyama 2010, Yuyama 2014).

Postscriptural Acknowledgment: — I would like to take this opportunity to express my sincere gratitude to those who have supported my research work for the past decades until today. In particular, while I was writing this paper, quite a few friends of mine both at home and abroad had generously helped me through offering their hands in search of references I was looking for. Needless to say, I am alone responsible for any factual mistake or arbitrary prejudice and judgment. Finally at this very end I would like to conclude with a few more words: I must sincerely beg the pardon of the readers of this humble paper. While I was writing this article, many questions arose one after another. I have thus rewritten some paragraphs or added more remarks on the topic. This must have invited logically clumsy arguments. It is hoped that the discerning readers will have already entered into my intent. Thanking you for your courteous attention.

Abbreviations and Bibliography

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Bibliographical epilogue: — To confess frankly, I regret very much that I must certainly have missed a number of important works on the relevant problems. In particular many fruits of research into the history of printing, designing and binding books may have escaped my memory — particularly among others those works done by leading specialists in Mainland China. For example, I have been unable to see the papers by Hsü Chuang (徐莊/Xú Zhuāng) on the Hsi-hsia printing by carving characters: e.g. 徐莊, “略談西夏雕版印刷在中國出版史中的地位”, 寧夏社會科學, 1994年第二期. This seems to be the paper read at the second conference on the Chinese printing techniques (第二屆中國印刷術研討會) held in August 1990.